

52. (New) The process in accordance with claim 48 wherein the energy source selectively heats the surface of the meat product by creating an environment having a temperature from about 400°C to about 425°C.

REMARKS

Claims 1 to 52, as amended, are pending. Applicant has amended claims 1, 3, 4, 8, 9, 14, 16, 20, 21, 23, 24, 27, 29 and 30, and added new claims 31 to 52. Attached hereto is a marked-up version of the changes made to the above-identified application by the current amendment, which is captioned "Version with markings to show changes made." The amendments and new claims find full support in the original specification and claims. In particular, new claims 39 to 41 and 50 find support in Example 2. No new matter is presented. In view of the above amendments and following remarks, Applicant respectfully requests favorable reconsideration and a timely indication of allowance.

The Examiner rejected claims 1 to 30 under 35 U.S.C. § 103(a) as allegedly unpatentable over Singh (U.S. Patent No. 5,952,027) in combination with Westerberg (U.S. Patent No. 5,990,454). Applicant respectfully traverses this rejection.

Claim 1 recites a process for browning precooked, whole muscle meat products. The process comprises coating a browning liquid pyrolysis product onto at least a portion of the surface of a whole muscle meat product; and then exposing the coated surface to an energy source creating an environment having a temperature greater than about 400° C for a time sufficient to selectively heat the coated surface of the whole muscle meat product without substantially shrinking the precooked, whole muscle meat product.

Singh discloses a method of producing a crisp surface and imparting a uniform golden-brown color to a precooked whole muscle meat product. Singh's method involves coating the meat product with a browning liquid pyrolysis product and then exposing the coated surface to an energy source to selectively heat the coated surface without substantial shrinking of the meat product. Singh teaches that the energy source selectively heats the surface of the meat by creating an environment having a temperature greater than about 60 °C, preferably from about 100 °C to about 290 °C. As recognized by the Examiner, Singh does not teach or suggest heating in an environment having a temperature greater than about 400°C, as presently claimed.

To make up for this deficiency, the Examiner relies on Westerberg. Westerberg is generally directed to a lightwave oven and a method of cooking food using the lightwave oven. Westerberg notes that certain foods may need a little more or less browning time than called for in the bake formula provided for that food. Westerberg therefore suggests switching from cook mode to a crisp mode for the last few minutes of the cooking sequence where necessary for further browning. The Examiner cites to Westerberg's teaching that different crisp modes can be achieved by operating and activating three upper lamps with a total power of 1.9 KW, where each lamp would run well below the 2900 °K color temperature at which two full power lamps operate.

As an initial matter, the Examiner is relying on Westerberg's teaching of a lamp temperature, not an environment temperature, as presently claimed. The environment temperature is not merely a direct function of the lamp temperature, but depends upon numerous other variables. For example, the type of surface of the lamp source, the emissivity of the surface of the light source, the composition of the environment (such as the concentration of water vapor and CO₂), the distance between the lamp and the environment, the exhaust design in the oven, the air circulation design, pattern and magnitude, and the emissivity of the meat product all affect the temperature of the environment. Nothing in Westerberg's disclosure even hints at the claimed environment temperature, much less suggests that the environment temperature, rather than the lamp temperature, be selected to produce a desired browning effect.

Moreover, when referencing the lamp temperature cited by the Examiner, Westerberg merely states that "each lamp would run well below the 2900 °K color temperature that two full power lamps operate." (Column 18, lines 4 to 5.) Westerberg provides absolutely no guidance as to how much lower the lamps would run. In fact, Westerberg may contemplate that the lamps run so low as to produce an environment temperature less than the 290 °C temperature taught by Singh. However, we do not know, because Westerberg provides no guidance in this regard. Absent such guidance, Westerberg provides no motivation to modify Singh's temperature to be above 400 °C, much less at a temperature ranging from 425 °C to 700 °C as recited in dependent claim 11, or at a temperature ranging from 450 °C to 650 °C as recited in dependent claim 12. At best, Westerberg recognizes that the oven conditions should be modified between the cooking and crisping operations. This recognition is insufficient to motivate one skilled in the art to modify Singh's process to arrive at the claimed invention.

Moreover, Westerberg's method does not involve the use of a browning agent, such as the browning liquid pyrolysis product recited in the present claims. In the Background, Westerberg references browning (Maillard) reactions that are initiated at about 300 °F. However, Westerberg goes on to teach a method that allegedly offers advantages over such browning reactions and other cooking methods in conventional ovens. Nothing in Westerberg teaches or suggests that the "crisping operations" discussed at columns 17 to 18 could be used in connection with a browning agent, as in the present invention or in Singh. Thus, one skilled in the art reading about Westerberg's lightwave oven method would find no motivation to use the disclosed techniques to modify Singh's method involving a liquid browning agent.

Moreover, the Examiner's rejection fails to address any of the dependent claims. As noted above, dependent claims 11 and 12 recite temperature ranges that are in no way taught or suggested by Westerberg. Additionally, claim 13 recites that the coated surface is exposed to the energy source for one minute or less. Although Singh provides a general statement that the meat product is exposed to the energy source "for a relatively short length of time" (column 5, lines 26 to 29), Singh's examples recite exposure times of eight minutes, five to six minutes, six minutes and two minutes. Westerberg similarly recites crisping times ranging from two to ten minutes. (See column 17, lines 35 to 40.) Thus, neither Westerberg nor Singh teaches or suggest the claimed exposure time.

For all these reasons, the combination of Westerberg and Singh fails to teach or suggest the claimed invention. Accordingly, Applicant respectfully requests that the rejection under section 103 be withdrawn.

Additionally, the Examiner has rejected claims 1 to 30 under the judicially created doctrine of obviousness-type double patenting as allegedly unpatentable over claims 1 to 10 of U.S. Patent No. 5,952,027 to Singh. Applicant respectfully traverses this rejection.

"A double patenting rejection of the obviousness-type is 'analogous to [a failure to meet] the nonobviousness requirement of 35 U.S.C. 103' except that the patent principally underlying the double patenting rejection is not considered prior art." M.P.E.P. § 804, page 800-22 (August 2001) (quoting *In re Braithwaite*, 154 U.S.P.Q. 29 (C.C.P.A. 1967)). "Therefore, any analysis employed in an obviousness-type double patenting rejection parallels the guidelines for analysis of a 35 U.S.C. 103 obviousness determination." *Id.*

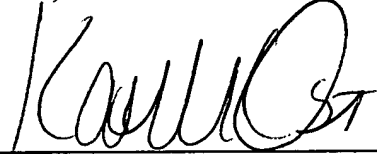
Application No. 09/772,100

In the present case, the Examiner acknowledged that Singh does not teach heating at a temperature above 400 °C. (See Office action at 3.) Nothing in Singh even suggests heating at such a high temperature. If the entire Singh patent does not teach or suggest the presently claimed invention, the claims of Singh certainly fail to do so. Accordingly, the Singh claims fail to render obvious the claims of the present application, and Applicant therefore requests that the obviousness-type double patenting rejection be withdrawn.

For all these reasons, pending claims 1 to 40 are in condition for allowance, and a timely indication of allowance is respectfully requested. If there are any remaining issues that can be addressed by telephone, Applicant invites the Examiner to contact the undersigned at the number indicated below.

Respectfully submitted,

CHRISTIE, PARKER & HALE, LLP

By 

Kathleen M. Olster
Reg. No. 42,052
626/795-9900

KMO/edb

VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS:

Please amend claims 1, 3, 4, 8, 9, 14, 16, 20, 21, 23, 24, 27, 29 and 30 as follows:

1. (Amended) A process for browning a precooked, whole muscle meat [~~products~~] product comprising:

coating a browning liquid pyrolysis product onto at least a portion of the surface of the precooked, whole muscle meat product; and then

exposing the coated surface to an energy source [~~creating~~] that creates an environment having a temperature greater than about 400° C for a time sufficient to selectively heat the coated surface of the whole muscle meat product [~~and develop a golden-brown to mahogany- brown color on the exposed surface,~~] without [~~substantial~~] substantially shrinking the [~~precooked, whole muscle~~] meat product.

3. (Amended) The process in accordance with claim 2 wherein the precooked, whole muscle meat product is [~~a~~] precooked turkey breast or [~~a~~] precooked chicken breast.

4. (Amended) The process in accordance with claim 2 wherein the browning liquid pyrolysis product is obtained from the pyrolysis of [~~hardwoods~~] hardwood or [~~sugars~~] sugar.

8. (Amended) The process in accordance with claim 2 [~~further comprising~~] wherein the browning liquid pyrolysis product contains a masking agent or flavoring enhancing composition.

9. (Amended) The process in accordance with claim 3 [~~further comprising~~] wherein the browning liquid pyrolysis product contains from about 0.5 to about 15 wt. % turkey flavor or turkey broth or a mixture of the two.

14. (Amended) The process in accordance with claim 2 [~~further comprising~~] wherein, prior to exposing the meat product to the energy source, the temperature at the core of the meat product is less

than about 5° C and immediately after browning the meat product, the temperature at the core of the meat product is less than about 8°C.

16. (Amended) A process for browning [a] precooked chicken breast or [a] precooked turkey breast comprising:

coating at least a portion of the surface of [a] the precooked chicken breast or [a] the precooked turkey breast with from about 0.05 to about 1.0 wt. %, based on the weight of the breast, of a browning liquid pyrolysis product obtained from hardwoods or sugars [~~to a breast~~]; and then

selectively heating the coated surface of the breast in an environment having a temperature greater than about [~~425°C~~] 400 °C with energy provided by an infra red radiation source for one minute or less.

20. (Amended) The process in accordance with claim 18 [~~further comprising~~] wherein the browning liquid pyrolysis product contains a masking agent or flavoring enhancing composition.

21. (Amended) The process in accordance with claim 20 [~~further comprising~~] wherein the browning liquid pyrolysis product contains from about 0.5 to about 15 wt. % turkey flavor or turkey broth or a mixture of the two.

23. (Amended) The process in accordance with claim 16 [~~further comprising~~] wherein, prior to exposing the meat product to the energy source, the temperature at the core of the [~~meat product~~] breast is less than about 5° C and, immediately after browning the meat product, the temperature at the core of the meat product is less than about 8°C.

24. (Amended) The process in accordance with claim 23 wherein prior to exposing the [~~meat product~~] breast to the energy source, the temperature at the core of the [~~meat product~~] breast is less than about 5° C and immediately after browning the [~~meat product~~] breast, the temperature at the core of the [~~meat product~~] breast is less than about 5°C.

27. (Amended) The process in accordance with claim 16 wherein the shrinkage of the precooked~~[, whole muscle meat product]~~ breast is less than 1 wt. % based on the initial weight of the ~~[meat product]~~ breast.

29. (Amended) The process in accordance with claim 16 wherein the ~~[whole muscle meat product]~~ breast has protrusions on its surface caused by precooking in a net.

30. (Amended) A process for browning a precooked, whole muscle meat ~~[products]~~ product comprising:

precooking [a] the whole muscle meat product in a netting bag;

removing the bag;

coating a browning liquid pyrolysis product onto at least a portion of the surface of the precooked whole muscle meat product; and then

exposing the coated surface to an energy source [and] at a temperature and for a time sufficient to selectively [heating] heat the coated surface of the whole muscle meat product ~~[at a temperature and for a time sufficient to develop a golden-brown color on the exposed surface,]~~ without ~~[substantial]~~ substantially shrinking the precooked, whole muscle meat product.